

09/9/16, 235

**METHOD FOR DETECTING AND TREATING TUMORS USING
LOCALIZED IMPEDANCE MEASUREMENT**

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Cross-Related Applications

This application claims the benefit of priority to US Provisional Application Serial No. 60/220,639 filed July 25, 2000, entitled "Tissue, Monitoring and Characterization Apparatus and Method", which is fully incorporated by reference herein. This application is also related to co-pending application attorney docket number 13724-849 which is also fully incorporated by reference herein.

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09/9/16, 214

Field of the Invention

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This invention relates generally to a method for performing tissue characterization using minimally invasive methods. More particularly, the invention relates to a method and apparatus for performing an in vivo tissue characterization to identify and discriminate between diseased and healthy tissue using localized measurement of tissue impedance. Still more particularly, the invention relates to method and apparatus for performing tissue characterization before, during or after ablative therapy using localized complex impedance measurement to monitor and titrate the delivery of ablative therapy to improve clinical outcomes.

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BACKGROUND OF THE INVENTION

Various ablative therapies such as radio-frequency, microwave and laser ablation can be used to treat benign and cancerous tumors. In theory, such methods are intended to produce physiological and structural changes to cause cell necrosis or destruction of the selected target tissue. However in practice, there are numerous difficulties in the use of ablative procedures to treat

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